

# United States Part and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20241 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09 694,554	10/23/2000	Richard O. Moore JR.	G-0004	9964
75	90 02/25/2003			
BURNS, DOANE, SWECKER & MATHIS			EXAMINER	
P.O. BOX 1404 ALEXANDRIA	P.O. BOX 1404 ALEXANDRIA, VA 22313-1404		NORTON, NADINE GEORGIANNA	
			ART UNIT	PAPER NUMBER
			1764	_

DATE MAILED: 02 25/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

•		, .1 4
	Application No.	Applicant(s)
<b>)</b> .	09/694,554	MOORE, RICHARD O.
Office Action Summary	Examiner	Art Unit
	Nadine Norton	1764
The MAILING DATE of this communication	appears on the cover sheet	with the correspondence address
Period for Reply	-DLV 10 OFT TO EVDIDE 9	MONTH(C) FROM
A SHORTENED STATUTORY PERIOD FOR RETURN THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, - If NO period for reply is specified above, the maximum statutory property of the period for reply within the set or extended period for reply will, by some - Any reply received by the Office later than three months after the rearned patent term adjustment. See 37 CFR 1.704(b).	DN. R 1.136(a). In no event, however, may a n. a reply within the statutory minimum of the eriod will apply and will expire SIX (6) Mo statute, cause the application to become	a reply be timely filed  nirty (30) days will be considered timely.  DNTHS from the mailing date of this communication.  ABANDONED (35 U.S.C. § 133).
1) Responsive to communication(s) filed on	09 December 2002 .	
2a)☐ This action is <b>FINAL</b> . 2b)⊠	This action is non-final.	
3) Since this application is in condition for a closed in accordance with the practice ur Disposition of Claims	llowance except for formal m nder <i>Ex parte Quayle</i> , 1935 (	natters, prosecution as to the merits is C.D. 11, 453 O.G. 213.
4) Claim(s) 2-4,7-11,16-18 and 24-30 is/are	pending in the application	
4a) Of the above claim(s) is/are with		
	idiawii itomi consideration.	
5)  Claim(s) is/are allowed. 6)  Claim(s) <u>2-4,7-11,16-18 and 24-30</u> is/are	rejected	
	cjected.	
7) Claim(s) is/are objected to.	nd/or election requirement	
8) Claim(s) are subject to restriction a Application Papers	na/or election requirement.	
9)☐ The specification is objected to by the Exam	miner.	
10) ☐ The drawing(s) filed on is/are: a) ☐	accepted or b) objected to by	y the Examiner.
Applicant may not request that any objection		
11)☐ The proposed drawing correction filed on _	is: a)□ approved b)□	disapproved by the Examiner.
If approved, corrected drawings are required	in reply to this Office action.	
12) The oath or declaration is objected to by the	e Examiner.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for fo	reign priority under 35 U.S.C	C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority docur	ments have been received.	
2. Certified copies of the priority docur	ments have been received in	Application No
3. Copies of the certified copies of the application from the Internations  * See the attached detailed Office action for a	al Bureau (PCT Rule 17.2(a)	).
14) Acknowledgment is made of a claim for dor		
a) The translation of the foreign languag 15) Acknowledgment is made of a claim for do	e provisional application has	been received.
Attachment(s)	,	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-94 3) Information Disclosure Statement(s) (PTO-1449) Paper N	8) 5) Notice	ew Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)

Art Unit: 1764

#### DETAILED ACTION

# Withdrawal of Objection to Specification

Applicant's amendments filed 12-9-02 in paper no.13 are sufficient to overcome the previous objection to the specification.

# Withdrawal of Claim Rejections Under 35 USC § 112

Applicant's amendments filed 12-9-02 in paper no.13 are sufficient to overcome the previous 112 rejection of claims.

# Withdrawal of Claim Rejections Under 35 USC § 102 or 103

Applicant's amendments/arguments are sufficient to overcome the rejection of claims 1, 2, 5, 6, 11-15 and 19-23 as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Smith et al.(4,544,792) and claims 3, 4, 7-10 and 16-18 under 35 U.S.C. 103(a) as being unpatentable over Smith et al.(4,544,792).

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 24-29 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 583 836.

Art Unit: 1764

Applicants are claiming a process for the hydroconversion of a Fischer-Tropsch hydrocarbon stream comprising adding a hydrogen containing gas to the stream, heating the stream, adding a second hydrogen containing gas to the heated stream, heating the stream to reaction temperature and hydroconversting the feedstream

The reference of EP 0 583 836 A1 discloses a process of treating hydrocarbon feed containing oxygenates and unsaturates that was derived from FT-synthesis. See page 3, lines 16-21. The process includes adding hydrogen to a first hydroconversion step under conditions including a temperature of 100-300°C. See page 5, lines 4-10. The hydrogen is added at a rate of a ghsv of 100-1000 NI/I/hr. See page 5, lines 6-10. Next, at least a portion of the treated feed is subjected to a second hydroconversion step at 175-400°C. See page 5, lines 23-34 and 58. The hydrogen is added at a rate of a ghsv of 100-1000 NI/I/hr. See page 6, lines 1-5.

The reference of EP 0 538 836 succeeds at disclosing a process involving applicants' two step hydrogen contacting steps and heating steps. It appears that the disclosed hydrogen amount overlaps applicant's hydrogen amount. The overlapping amounts anticipate applicant's claimed hydrogen amount.

Applicant's "reduction in the formation of heavy molecular weight products during heating" would inherently be accomplished because the same feed and process steps are disclosed.

Applicant's process is anticipated by EP 0 538 836 because it discloses essentially the same steps claimed by applicants.

Art Unit: 1764

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 3, 4, 7, 8, 9, 10, 11, 16, 17, 18 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 538 836. -See teachings of EP 0 538 836 above.

Several differences are noted between the reference of EP 0 538 836 and applicant's claimed invention. The reference is silent about the specific percentages of mono-olefins or oxygenates in the feed and the boiling point of the feed. The reference does not disclose all of applicant's claimed sources of hydrogen.

It would have been obvious to one of ordinary skill in the art to treat any low boiling point Fischer-Tropsch feed according to the process of EP 0 538 836, including a feed with the specific percentages of olefins, and specific percentages of alcohols and boiling point defined in applicants' dependent claims, because the reference does not limit the percentage of such components in the feed. Since the reference discloses the general conversion of such components, it would convert any percentage that may be present in the feed.

Art Unit: 1764

In addition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ hydrogen from "any" available source because hydrogen has the same properties regardless of its source.

Response to Arguments

Applicant's arguments filed 12-9-02 with respect to the pending claims have been considered but are most in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadine Norton whose telephone number is 703-305-2667. The examiner can normally be reached on Monday through Thursday from 8:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.

N.N. February 11, 2003

> NADINE G. NORTON PRIMARY EXAMINER

Page 5